

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for locating a discrepancy in mapping information that maps an identifier to a particular resource, the method comprising acts of:
determining a first mapping;
determining a second mapping; ~~and~~
comparing the first mapping to the second mapping and identifying at least one discrepancy between the first and second mapping; and
generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping.
2. (Original) The method of claim 1, wherein the act of determining a second mapping comprises acts of querying a nameserver and receiving a response from the nameserver, the response containing the second mapping.
3. (Original) The method of claim 1, wherein the act of determining a first mapping comprises an act of obtaining an authoritative mapping from an authoritative source.
4. (Original) The method of claim 3, wherein the authoritative source is at least one of:
an authoritative nameserver; and
a database storing a plurality of authoritative mappings.
5. (Original) The method of claim 1, further comprising an act of reporting the at least one discrepancy to a user.

6. (Original) The method of claim 1, wherein the first mapping is a first namespace mapping that maps a first name to a first resource and the second mapping is a second namespace mapping that maps a second name to a second resource.
7. (Original) The method of claim 6, wherein the first namespace mapping is stored on an authoritative nameserver and the act of determining a first mapping comprises an act of obtaining the first mapping from the authoritative nameserver.
8. (Original) The method of claim 6, wherein the act of determining a second mapping comprises acts of querying a nameserver and receiving a response from the nameserver, the response containing the second mapping.
9. (Original) The method of claim 2, further comprising an act of compiling a list of nameservers to be queried.
10. (Original) The method of claim 8, wherein the act of querying a nameserver comprises an act of requesting at least one namespace mapping record from the nameserver.
11. (Original) The method of claim 9, wherein the act of compiling a list of at least one nameserver comprises acts of:
 - sending a namespace mapping resolution query to a plurality of network nodes;
 - waiting for one or more responses from the plurality of network nodes; and
 - determining whether a network node in the plurality of network nodes is a nameserver.
12. (Currently Amended) The method of claim 11, wherein the act of determining comprises an act of determining whether the network node in the plurality of network nodes is a the nameserver based on a format of one or more responses received from the network node.

13. (Original) The method of claim 11, wherein the act of determining comprises an act of determining that a network node in the plurality of nodes is not a nameserver if the network node does not respond to the namespace mapping resolution query.

14. (Original) The method of claim 9, wherein the act of compiling a list of at least one nameserver comprises an act of:

listening for a request from a non-authoritative nameserver to an authoritative nameserver; and

when the request is detected, adding the non-authoritative nameserver to a list of nameservers.

15. (Original) The method of claim 14, wherein the request is a resolve request.

16. (Currently Amended) A method for discovering nameservers, comprising acts of:

sending a namespace mapping resolution query to a plurality of network nodes;

waiting for one or more responses from at least one of the network nodes; ~~and~~

determining whether a network node in the plurality of network nodes is a nameserver;

and

storing, in a storage device in a monitoring computer, an indication that the network node is a nameserver in response to the act of determining.

17. (Currently Amended) The method of claim 16, wherein the act of determining comprises an act of determining whether a the network node in the plurality of network nodes is a nameserver based on a format of the response from the network node.

18. (Currently Amended) The method of claim 16, wherein the act of determining comprises an act of determining that a the network node in the plurality of nodes is not a nameserver if the network node does not respond to the namespace mapping resolution query.

19. (Currently Amended) A method for discovering nameservers, comprising acts of:

listening for a request from a non-authoritative nameserver to an authoritative nameserver; ~~and~~

when the request is detected, adding the non-authoritative nameserver to a list of nameservers; and

storing the list of nameservers in a memory of a monitoring computer system.

20. (Original) The method of claim 19, wherein the request is a resolve request.

21. (New) An apparatus for locating discrepancies in domain name databases, the apparatus comprising:

a detector adapted to determine a first mapping and a second mapping, wherein the detector is further adapted to compare the first mapping to the second mapping and to identify at least one discrepancy between the first mapping and second mapping; and

a component adapted to generate an alert message and send the alert message to a user, the alert message indicating the at least one discrepancy between the first mapping and the second mapping.

22. (New) The apparatus according to claim 21, further comprising a database configured to store the first mapping and the second mapping.

23. (New) The apparatus according to claim 22, wherein the apparatus is configured to obtain an authoritative mapping from an authoritative source and store the authoritative mapping in the database.

24. (New) The apparatus according to claim 22, wherein the apparatus is configured to query a nameserver, and store the second mapping contained within a response received from the nameserver.

25. (New) The apparatus according to claim 21, further comprising a discoverer adapted to discover at least one nameserver among a plurality of network nodes.